```
1993:562095 CAPLUS
ΑN
    119:162095
    Bisphenol-type epoxy resin compositions for sealing
DN
TТ
     semiconductor devices
     Tauchi, Shigeaki; Tamai, Norya
IN
     Shinnittetsu Kagaku, Japan
     Jpn. Kokai Tokkyo Koho, 7 pp.
SO
     CODEN: JKXXAF
     Patent
DT
     Japanese
LА
         C08G059-62; C08K003-36; C08L063-00; H01L023-29; H01L023-31
     ICM C08G059-18
IC
     38-3 (Plastics Fabrication and Uses)
CC
     Section cross-reference(s): 76
                                           APPLICATION NO. DATE
FAN.CNT 1
                     KIND DATE
     PATENT NO.
                                           _____
                            _____
     _____
                                           JP 1991-296445
                                                           19911016
                            19930427
     Solder heat-resistant title compns. with low stress contain 100 parts
 PΙ
     epoxy resins contg. .gtoreq.30% biphenyl-type
 AΒ
     epoxy resins, 300-1000 parts silica filler, 1-30 parts
     oils (R1)(SiR2R30) nSiR4 (R1 = epoxy, amino, OH, OH-contg. group, SH; R2-4 =
     Me, Ph; n = no. to av. mol. wt. 1000-30,000), and 20-100 parts hardeners.
      Thus, a mixt. of YX 4000 100, tetraphenolethane 50, globular powd. silica
      500, crushed powd. silica 200, an epoxy-terminated silicone oil 5,
      .gamma.-glycidoxypropyltrimethoxysilane 4, Ph3P 1, carbon black 3, and a
      wax 3 parts was kneaded at 110.degree. for 4 min, crushed, molded onto an
      integrated circuit, and postcured at 85.degree. and 85% humidity for 72 h
      to give a test piece, which was impregnated with solder bath at
      260.degree. for 10 s to show no cracks.
      semiconductor device sealant epoxy resin; solder heat
      crack resistance sealant; biphenyl epoxy resin
 ST
      siloxane sealant; silica filler epoxy resin sealant
      Potting compositions
          (biphenyl-type epoxy resins contg. siloxanes, with
 IT
         solder heat resistance, for semiconductor devices)
      Heat-resistant materials
          (bisphenol-type epoxy resin-siloxanes, sealants,
  ΙT
          for semiconductor devices)
       Phenolic resins, uses
       RL: MOA (Modifier or additive use); USES (Uses)
  IT
          (crosslinking agents, for epoxy resins contg.
          functional group-terminated siloxanes, for sealants, for semiconductor
          devices)
       Crosslinking agents
  IT
          (for epoxy resins contg. functional
          group-terminated siloxanes, for sealants, for semiconductor devices)
       Siloxanes and Silicones, uses
  IT
          (epoxy, sealing compns., contg. silica fillers, with solder heat
       RL: USES (Uses)
          resistance, for semiconductor device)
       Siloxanes and Silicones, compounds
  TT
       RL: USES (Uses)
           (epoxy-terminated, reaction products with epoxy
        resins, for sealants, for semiconductor devices)
       Epoxy resins, uses
  ΤТ
           (siloxane-, sealing compns., contg. silica fillers, with solder heat
        RL: USES (Uses)
           resistance, for semiconductor device)
```

▶ IT -7727-33-5 RL: MOA (Modifi or additive use); USES (Uses) (crosslinking agents, for epoxy resins contg. funcional group-temrinated siloxanes, for sealants, for semiconductor devices) 25639-41-2 RL: MOA (Modifier or additive use); USES (Uses) IT(crosslinking agents, for epoxy resins contg. functional group-terminated siloxanes, for sealants, for semiconductor devices) 60676-86-0, Fused silica IT RL: USES (Uses) (powd., fillers, for epoxy resin sealing compns. contg. functiontal group-contg. siloxanes, for semiconductor devices) 89118-70-7DP, YX 4000, reaction products with siloxanes RL: PREP (Preparation) (prepn. of, sealants, with solder heat resistance, for semiconductor

devices)

7727-33-5 REGISTRY Phenol, 4,4',4'',4'''-(1,2-ethanediylidene)tetrakis- (9CI) (CA INDEX RN CN OTHER CA INDEX NAMES: Phenol, 4,4',4'',4'''-ethanediylidenetetra- (6CI) OTHER NAMES: 1,1,2,2-Tetrakis(4-hydroxyphenyl)ethane 1,1,2,2-Tetrakis(p-hydroxyphenyl)ethane CN TEP-DF CN C26 H22 O4 MF BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, COM CI STN Files: LCCHEMLIST, IFICDB, IFIUDB, TOXLIT, USPATFULL (*File contains numerically searchable property data) Other Sources: EINECS**, NDSL**, TSCA** (**Enter CHEMLIST File for up-to-date regulatory information)

- 59 REFERENCES IN FILE CA (1967 TO DATE)
- 8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 59 REFERENCES IN FILE CAPLUS (1967 TO DATE)
- 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)